ABSTRACT OF THE DISCLOSURE

A PCR apparatus has a specimen chamber, a heating conduit which communicates with the specimen chamber, a cooling conduit which communicates with the specimen chamber, and a pumping device for pumping a gaseous or liquid medium through the heating conduit and/or the cooling conduit to the specimen chamber. The PCR apparatus further has a heating device, disposed separately from the cooling conduit, which communicates with the heating conduit and heats the medium located in the heating conduit c. The PCR apparatus has further a mixing device, which communicates with the heating conduit and with the cooling conduit, such that a ratio between a volume of the medium flowing per unit of time through the heating conduit and a volume of the medium flowing per unit of time through the cooling conduit to the specimen chamber is adjustable.